Chromatographia Vol. 23, 1987 Author Index

Abdalla, S. 83
Abraham, M.H. 243
Adlard, E.R. 65, 222, 606, 691
Ali, I. 141, 207
An-qing Zou 112
Antakli, S.C. 767
Arai, K. 89
Atomura, M. 752
Ayala, Ana M. 26

Baeyens, W. 289, 717
Baiocchi, C. 736
Balard, H. 639
Barcelo, D. 481
Barrón, L.J.R. 209
Bartley, J.P. 129
Bayer, E. 83
Bens, G. 893
Berek, D. 442
Berg, R. 269
Bermejo, J. 33, 179
Bertrand, C. 684
Bhattacharyya, P. 205
Bhushan, R. 141, 207
Bianchini, J.P. 15
Bicchi, C. 818
Bighi, C. 713, 844
Billing, U. 590
Bingcheng Lin 478, 492
Bitteur, S. 163
Blanco, C.G. 33
Bokic, Lj. 477
Boneva, S. 50, 770
Bordás, B. 184
Borea, P.A. 713
Bossche, W., Van den 407
Bosset, J.O. 199
Bourne, A.R. 31
Boussairi, A. 651
Brancaleoni, E. 803
Bratu, D. 412
Bruner, F. 789, 856
Buben, J. 286
Buszewski, B. 442

Calvo, M.M. 132
Cantone, F. 736
Carfagnini, G. 835
Cartoni, G.P. 790, 825, 844
Carunchio, V. 731
Castello, G. 839
Caude, M.H. 21
Cavrini, V. 680
Cecinato, A. 803
Cerjan-Stefanovic, S. 477
Chan, Shih-Jen 3
Checchini, L. 814
Chen Bangjie 888
Chen Yao-zu 502
Chen, Ya-Chi 240
Chowdhury, B.K. 205
Chuang, C.H. 169
Ciccioli, P. 803, 829
Ciucanu, I. 574
Claessens, H.A. 189, 331
Colmsjö, A.L. 257, 903
Corradini, C. 118
Cowles, J. 240
Cramers, C.A. 189
Cremlyn, R.J. 328
Crescentini, G. 856
Cserháti, T. 184

D'Amato, A. 818
D'Amato, Guiseppina 839
d'Ascenzo, G. 796
Daixin Tong 499
Damme, F., Van 292
Darbari, Anjana 93
Dawson, J. 328
De Moerloose, P. 289, 407, 667, 717, 893
De Schutter, J.A. 667
De Spiegeleer, B. 407
Desideri, P.G. 814
Desty, D.H. 319
Deveaux, M. 626
DiCorcia, A. 835
Diez, M.A. 33
Dimitrov, Chr. 561
Dimov, N. 770
DiPalo, V. 829
DiPietra, A.M. 680
Domingo-García, M. 97
Dondi, F. 844
Donnet, J.B. 121, 279
Draisci, R. 803, 829
Durbin, R.D. 115

Ebel, S. 934
Edlund, P.O. 709
Eeckhout, E., Van den 893
Eek, L. 481
Engelhardt, H. 381, 657
Engewald, W. 561, 590
Ettre, L.S. 545
Evans, M.B. 328

Fabbri, A. 856
Facchini, L. 639
Fanali, S. 811
Fangbao Xu 499
Farmer, E.E. 115
Fatima, N. 653
Federici, F. 118
Felix, G. 684
Fen Ye 492
Fernandez-Morales, I. 97
Fischer, W. 137
Franco, J.M. 26, 557
Frank, H. 83
Frattini, C. 818
Fujimoto, C. 512
Fukui, T. 247
Fukushima, K. 325, 373

Gabris, P. 574
Galceran, M.T. 481
Garcia-Raso, A. 43
Garrido, J.L. 26, 557
Gatti, R. 680
Gauglitz, G. 395
Gaydou, E.M. 15
Gennaro, M.C. 747
Ginman, R. 145
Girelli, A.M. 731
Glöckner, G. 517
Gmür, W. 199
Golovnya, R.V. 595
Gonnord, M.F. 215
Gonzales de Llano, D. 764
Goretti, G. 790
Griffiths, P.R. 547
Guan, Yafeng 566
Guillén, M.D. 33
Guo Xijian 888
Guyon, F. 651

Hatano, H. 247
Haufe, G. 590
Hayada, M. 325
Heinemann, G. 435
Heise, H.M. 53
Helgeson, J.P. 115
Henry, D.E. 547
Hirata, Y. 663
Hommel, H. 639
Horka, M. 553
Hosotsubo, H. 89
Hupe, K.-P. 239
Huvenne, J.-P. 626

Ignatiadis, I. 215
Imaishi, H. 247
Inose, C. 648
Isfan, A. 7, 412
Isfan, C. 7
Ishii, D. 929
Iwaki, K. 727, 899
Iwamura, J.-I. 89

Jack, D.B. 775
Janak, K. 553
Janson, J.-Ch. 361
Jansson, S.-O. 341
Jelínková, M. 286
Jenjintanant, P. 893
Jianying Zhang 487
Jiao, Wang Meng 279
Jinno, K. 55, 320, 373, 473, 512, 631 675, 752
Jurasek, A. 442

Kahie, Y.D. 844
Kahle, V. 553
Kahovec, J. 286
Kakamu, H. 601
Karaiskakis, G. 447
Kastelan-Macan, M. 477

Katsanos, N.A. 447
Khan, H.A. 432
Khanna, J.M. 269
Kim, C. 269
Kinoshita, T. 727, 899
Klaus, R. 137
Klesper, E. 38, 171
Köhler, J. 341, 435, 465
Kolla, P. 465
Kondrat, R.W. 547
Kotinopoulos, M. 447
Kovacevic, M. 350
Kovacic-Bosnjak, N. 350
Kuczynski, J. 401
Kühnert, H. 934
Kuwajima, M. 631
Kuyken, M.A.J. 189, 331

Lagana, A. 796
Lairon Zhang 566
Lamparczyk, H. 337, 473, 752
Legrand, A.P. 639
Lepri, L. 814
Leyendecker, Dagmar 38, 171
Leyendecker, Dietger 38
Li Hai-quan 502
Li Zhao-lin 502
Lickl, E. 599
Lin, Bingcheng 487, 492
Litzén, A. 341
Lodi, G. 713, 844
Lomic, S.M. 915
López-Garzón, F.J. 97
Lord, E.B. 607
Lu, Peichang 487, 492, 499, 566
Lynes, A. 607

Mahabadi, P. 3
Makino, K. 247, 909
Mandic, Z. 350
Mangani, F. 856
Marchetti, M. 835
Marchetto, A. 736
Marino, A. 796
Martínez-Castro, I. 43, 132
Massart, D. 407
Mastrogiacomo, A.R. 856
Mathieu, D. 15
Matsumoto, T. 909
Matus, Z. 254
Mazerolles, G. 15
McGowan, J.C. 243
McKerrell, E.H. 222
Mehrotra, Pallavi 747
Mei Xie 112
Menéndez, R. 179
Mentasti, E. 736
Merlini, L. 814
Messina, A. 118, 731
Middleditch, B.S. 240, 273
Miles, C.J. 109
Moerloose, P., De 289, 407, 667, 717, 893
Mohammad, A. 653
Moinelo, S.R. 179
Molnár-Perl, I. 265, 760, 925
Morita, T. 512
Morvai, M. 265, 760, 925
Mourier, P.A. 21
Moye, H.A. 109
Mück, W. 934
Munteanu, D. 7, 412
Murata, S. 663

Nagahara, S. 909
Nagoshi, T. 473
Nak-June Sung 273
Nakano, A. 325
Nakata, F. 663
Nakatsuji, Y. 909
Nakazawa, H. 571
Nawrocki, J. 722
Nimura, N. 727, 899
Niotis, A. 447
Niwa, T. 929
Nobuhara, K. 325, 373
Nondek, L. 442
Noonpugdee, Ch. 47

Ochiai, S. 512
Ochocka, R.J. 337
Ogura, H. 727, 899
Ohmacht, R. 254
Ohs, P. 657
Okamoto, M. 325, 373, 601
Olano, A. 43, 132
Omori, Z. 601
Ösapay, G. 184
Ossicini, L. 811
Osterroht, C. 419
Östman, C.E. 903
Ozaki, H. 247

Pacáková, V. 102
Paez, M. 43
Papirer, E. 121, 279, 401, 639
Peichang Lu 487, 492, 499, 566
Peng Shaoyi 888
Pentoney, S.L. 547
Pesek, J.J. 3
Petrovic, S.M. 915
Petsev, N. 561
Phan Tan Luu, P. 15
Pietra, A.M., Di 680
Pietrogrande, C. 844
Pietrogrande, M.C. 713
Plattner, E. 199
Podmaniczky, L. 579
Polo, C. 764
Possanzini, M. 829

Raggi, M.A. 680
Rahmani, Y. 639
Rai, P.P. 205
Ramos, M. 764
Ramstad, T. 878, 883
Rani, A. 86
Rathore, H.S. 432
Reschiglian, P. 844
Rizzo, A.P. 825
Robert, A. 507
Ronchetti, M. 825
Rosset, R. 163
Rosset, R.H. 21
Russo, M.V. 790

Samperi, R. 835
Sandra, P. 850
Santa-María, G. 209
Sanz, J. 43
Sarzanini, C. 736
Saura-Calixto, F. 43
Scheld, W. 240
Schmid, W. 395
Schmitz, F.P. 38, 171
Schomburg, G. 435, 465
Schutter, J.A., De 667
Sefer, I. 915

Serpinet, J. 767
Settembre, G. 273
Sewell, P.A. 223
Shanfield, H. 169
Shimizu, T. 648
Siffert, B. 401
Simoens, G. 292
Simon, P. 507
Singh, D.K. 93, 747
Sinibaldi, M. 118, 731, 811
Siouffi, A.M. 15
Spiegeleer, B., De 407
Stalling, D.L. 545
Stulík, K. 102
Stuurman, H.W. 341
Sung, Nak-June 273
Suzuki, Y. 648
Szebenyi, I. 579
Szepesy, L. 579

Takeda, K. 727, 899
Takeuchi, T. 247, 909, 929
Tang, Xueyan 566
Tanigawa, E. 675
Tebbett, I.R. 377
Tesarik, K. 553
Tesarová. E. 102
Thienpont, A. 684
Tincul, I. 7
Toei, J.-I. 355, 583
Tong, Daixin 499
Topalova, I. 561

Uchytil, T.F. 115
Upadhyay, R.K. 86

Van Damme, F. 292
Van den Bossche, W. 407
Van den Eeckhout, E. 893
Van Der Weken, G. 289, 717
Vannieuwenhuyze, F. 850
Verzele, M. 292
Vidal, A. 121, 279
Vidal-Madjar, C. 215
Voelkel, A. 195

Wahyuni, W.T. 320
Wang Meng Jiao 121, 279
Wasiak, W. 261, 423, 427
Watkinson, R.J. 776
Watson, T.G. 31
Weaver, M.J. 878, 883
Weken, G., Van der 289, 717
Welsch, T. 590
Windmill, D.J. 31

Xu, Fangbao 499
Xuan-de Luo 112
Xueyan Tang 566

Ya-Chi Chen 240
Yafeng Guan 566
Yakush, E.V. 595
Yao, C.C.D. 370
Ye, Fen 492
Yoshida, S. 727, 899
Yoshimura, S. 325

Zapata, M. 26
Zhang, Jianying 487
Zhang, Lairong 566
Zhuravleva,I.L. 595
Zlatkis, A. 169, 240, 273, 370, 625
Zoccolillo, L. 825

Chromatographia Vol. 23, 1987 Subject Index

Accurate quantitation in GC 492
Activity coefficients, in LC 911
Adsorbents, for GC 722
Adsorbents, salt modified 447
Adsorption isotherms, on silica 279
Adsorption of alcohols on graphite 97
Adsorption of hydrocarbons on graphite 97
Adsorption sites, by GC 722
Adsorption, enthalpies of 644
Air sampling 507
Aldoses, tautomeric equilibrium mixtures of 43
Alkaline earth, ion chromatography of 583
Alkenylbenzenes, retention of 561
Alumina support, bonded 747
Amino acid derivatives, capacity factors of 677
Amino acids, LC and TLC of 814, 816
Amino compounds, optical resolution of 895
Amino-acids, derivatives for GC 83
Amino-acids, NH_3 removal from 115
Aminopropyl silica 899
Amperometric detection, in LC 651
Anion-exchange, Ni and Zn 355
Anion-exchange, on chitosan 731
Anion-exchangers, coated on alumina 435
Anion-exchangers, coated on silica 435
Anion-exchangers, polymer coated 435
Aromatic acids, n-propyl esters of 921
Aromatics, data for 826, 828
Arsenazo III colour-forming agent 583
Atmospheric samples, preparation of 805

Backflush technique, in LC 579
Backflushing, in GC 566
Barium sulphate, characterisation of 432
Bayer, E. editorial 239
Binary eluents, sub- and super-critical conditions 171
Blood analysis 269
Bonded phase, octadecyl microporous glass 325, 373
Bonded phase, polymer-based octadecyl 320
Bonded stationary phases, for GC 3
Butadiene-maleic acid polymer 465
Butyrophenones, LC data for 890

Capacity factors 913
Capacity factors, of chloroalkanes 262
Capacity factors, of chloroalkenes 262
Capillaries, in series 790
Capillary GC, of bacteria fatty acids 850
Capillary GC, of essential oils 790, 818
Carbamate intermediate, activated 727
Carbamate reagent, activated 895
Catalysis, on-column 709
Cation-exchange, of alkaline earth 583
Cation-exchange, of sugars 296
Cation-exchange, on polymer coatings 465
Cation-exchanger, weak 465
Cavity term, in LC 243
Characteristic volumes, in LC 243
Chiral derivatising agent 895
Chiral stationary phase, preparation of 727, 728
Chlorophyll pigments, identification of 27
Chromatograms, integration of 257
Chromatographic cross-fractionation 517
Chromatographic selectivity, book review 222
Chromatography, advances in, book review 223
Chromatography, integration routines for 257
Chromatography, of lactulose 132
Coal-derived liquids, fractionation of 179
Coal-derived products 579
Codeine, extraction of 377
Colour-froming agents in cation-exchange 583
Column efficiency utilisation ratio 487, 493
Column liquid chromatography - see LC
Column switching system for GC 499
Columns, varying polarity 790
Complex formation, by isotachophoresis 811
Concentration of impurities 370
Correlation criteria, in TLC 407, 409
Cross-linked polystyrene, characterisation of 341
Cu and Fe in cotton 477
Cyano-silica, Cu(II)modified 427
Cyanopropyl silicone columns 850
3-Cyanopropyltrichlorosilane-treated thin layers 601
Cycloalkadienes, retention data in GC 590
Cycloalkenes, retention data in GC 590
Cycloolefins, calculation of boiling points 35
Cycloolefins, physico-chemical properties of 33

Dead volumes, influence on trap injection 856
Dental resins, composition of 412
Dental restorative materials 412
Derivatisation with diacetyldihydrofluorescein 112
Derivatisation, post-column 711
Derivatisation, pre-column 717
Desorption device 502
Detection, electrochemical 874, 879
Detection, fluorescence 709. 717
Deuterium labelling 709
Dicarboxylic acids, ion-pair formation 811
Diethyl ether, as SFC mobile phase 925
Diethylenetriaminepentaacetic acid 747
Dipole moments, of solvents 338
Distal potentials 881
Distillation extraction, simultaneous 129
Disulfides, effect of reducing agents 717
DNA synthesis 907
Donor-acceptor complexes 684
Double-layer capacitance 874, 879
Dropping mercury electrode 874

Electric interaction indices 475
Environmental samples 370
Enzymatic assays 557
Epoxides, retention data for 770
Equilibria, by chromatography 215
Essential oils, GC of 790,818
Essential oils, selective sampling of 818, 819
Esterification, in aqueous solution 265, 760, 921, 922
Ethacrynic acid derivatives 680
Ettre, L. S. 625
Exhaust gases 829
Extract purification 796
Extraction, on graphitised carbon 835
(E)-1-Phenylpropene, reaction mechanism 395

Fatty acid methyl esters 851
Fatty acids in particulate matter 419
Fatty acids, bacterial 850
Flash chromatography, evaluation 179
Flash chromatography, of coal-derived liquids 179
Flavour compounds, book review 775
Flodin, Per 361
Fluorescent derivatives for TLC 289
Fourier transform infrared - see FTIR

Gas chromatography - see GC
Gas-solid chromatography 447
Gasoline aromatics, LC of 825
GC instrumentation 499
GC study, of adsorption on graphite 97
GC, allyl bonded phase for 3
GC, blood analysis by 269
GC, capillary, of aldose-TMS ethers 43
GC, capillary, of amino-acid enantiomers 83
GC, capillary, with Chirasil-Val 83
GC, characterisation of silica 279
GC, dual-column system 53
GC, glass capillary 770
GC, headspace analysis 129
GC, inverse 401, 639
GC, macroporous polymer for 286
GC, measurement of equilibria 215
GC, new bonded phase for 3
GC, of aliphatic hydroxy acids 760
GC, of alkenylbenzenes 561
GC, of alkylthiazoles 595
GC, of amino acids 497
GC, of amino-acid derivatives 83
GC, of aromatic carboxylic acids 921, 923
GC, of barbital and pentobarbital 269
GC, of chlorinated organics 856
GC, of chloro-alkanes and -alkenes 261
GC, of complex samples 492
GC, of cycloalkadienes 590
GC, of cycloalkenes 590
GC, of cycloolefins 33
GC, of dicarboxylic acid esters 265
GC, of epoxides 770
GC, of evolved methane 767
GC, of fatty acids 553
GC, of halothane gas mixtures 53
GC, of lactulose 135
GC, of olefins 423, 427
GC, of organics in aqueous samples 273
GC, of stillingia oil lipids 240
GC, on coated porous polymers 481
GC, on Cu(II) complexes 261
GC, on linked packed and capillary columns 487, 492, 499
GC, on modified PEG stationary phases 553
GC, on modified silicas 121
GC, on n-propyl esters 760
GC, on porous polymers 839
GC, on silicones 169
GC, polar packings for 286
GC, polarity parameters in 196
GC, retention indices 195
GC, retention indices of aldoses 44
GC, retention indices of C6 alkanols 50
GC, retention indices of cycloolefins 33
GC, retention prediction in 481
GC, reversed-flow 447
GC, structure-retention effects in 195
GC, temperature programmed 884
GC, thermodynamic functions from 97, 121
GC-FTIR of haloesters 547
GC-FTIR, of solvents 626
GC-MS of fragrance volatiles 502
GC-MS, of aldoses 43
GC-MS, of custard apple volatiles 129
GC-MS, of pentaerithritol 574
GC-NMR, of aldoses 43

Gehrke, CW, editorial 545
Gel electrophoresis of CuZn-superoxide dismutase 599
Gel-permeation chromatography - see SEC
Geometrical isomers 427
Glycols, detection of 137
Golay, M.J.E. 319
Gradient elution optimisation 844
Gradient elution solvents 798
Graphite fluoride adsorbent 370
Graphite, non-specific adsorption on 97
Growth hormone releasing factor 571

Haloesters, decomposition of 547
Halogenated hydrocarbons in water 370
Hansch constant 713
Haptoglobin-hemoglobin complex 88
Headspace analysis 626
Heats of adsorption, of chloroalkanes 263
Heavy oil residues 401
High-efficiency packed columns for GC 499
High-performance liquid chromatography - see LC
Human erythrocytes 599
Human serum 325
Hydratisation equilibria 709
Hydrochloric acid - thiocyanate mobile phases 648
2-Hydroxyethyl methacrylate polymer for GC 286

Injection techniques, large volume 331
Inorganic ions, TLC of 648
Interfacing techniques, SFC-IR 55
Ion-chromatography 874, 879
Ion-exchange chromatography, of amino-acids 114
Ion-exchange separations 438
Ion-pair formation 811
Ion-pair LC, with two counterions 667
Ion-pair systems 713
Ion-pairing agents, in LC 105
Isoenzymes 599
Isotachophoresis, capillary 811

Ketones in water 273
Kovats retention indices, of alkylthiazoles 595

Lactulose, chromatography of 132
Lavender oil 791
LC of codeine in blood 377
LC of sugars, review 292
LC retention times 13
LC systems for photokinetics 398
LC, activity coefficients in 911
LC, ammonium acetate buffer eluent 26
LC, as a purification method 905
LC, backflush 899, 900
LC, band broadening in 189
LC, capacity factors, reverse-phase 243
LC, cavity term in 243
LC, characteristic volumes 243
LC, column parameters in 889
LC, column temperature gradients in 209
LC, column-switching 47
LC, effect of C-content of silica packing 247
LC, effect of ion-pairing agents 105
LC, effect of pH 350
LC, equipment effects in 189
LC, frontal analysis in 163
LC, gradient elution 517
LC, in photokinetics 395
LC, injection techniques for 331
LC, ion-pair 667
LC, large scale 905
LC, linear gradient elution 26
LC, linear isotherms in 163
LC, measurement of equilibria 215
LC, microbore columns 331

LC, microcolumn 320
LC, mobile phase composition for 7
LC, of acetaldehyde 709
LC, of air pollutants 803, 829
LC, of aldecarb derivatives 109
LC, of aldehydes 803, 829
LC, of alkylbenzenes 343, 445
LC, of amines on Cu-impregnated silica 93
LC, of amino acid enantiomers 727
LC, of amino-acids 118, 731, 764, 814
LC, of amino-alcohols 346
LC, of aminodeacetoxycephalosporanic acid 350
LC, of antiepileptic drugs 373
LC, of arylsulphonohydrazides 328
LC, of biphenols 102
LC, of Bis GMA oligomers and isomers 412
LC, of bis(hydroxyphenol)propanes 102
LC, of butyrophenones 889
LC, of cephalexin monohydrate isomers 350
LC, of cheese peptides 764
LC, of chlorophyll degradation products 27
LC, of chlorophylls 26
LC, of complex biological samples 557
LC, of deoxynivalenol in silage 47
LC, of dihydroartemisin 112
LC, of dimethadione 325
LC, of disulfides 717
LC, of enantiomeric amino compounds 895
LC, of estriol 835
LC, of ethyl methacrylate copolymers 517
LC, of fat suluble vitamins 320
LC, of fatty acid esters 419
LC, of flavonoids 844
LC, of formaldehyde 709
LC, of fungicides 328
LC, of gasoline aromatics 825
LC, of gonadal steroid epimers 31
LC, of inorganic ions 877
LC, of lactulose 133
LC, of light stabilisers 7
LC, of marine phytoplankton 26
LC, of metal complexes 736
LC, of methantheline bromide 667
LC, of metoclopramide 651
LC, of morphine in blood 377
LC, of Ni, Zn 355
LC, of nucleotides 731
LC, of o-phthalaldehyde amino acid derivatives 675
LC, of oligodeoxy-ribonucleotides 905
LC, of oligosaccharides 557
LC, of organic charged species 879
LC, of oxy-PAH 803, 808
LC, of PAH 473, 684, 725, 803, 808, 825, 899
LC, of peptide isomers 571
LC, of peropyrene PAH 473
LC, of pesticides 109
LC, of phenolics 579
LC, of phenols 844
LC, of phosphotungstic acid peptides 764
LC, of polymethoxylated flavones 15
LC, of polyolefin antioxidants 7
LC, of propantheline bromide 667
LC, of PTH amino acids 373
LC, of racemates 118
LC, of ß-carbolines 713
LC, of single-strand oligo-DNAs 247
LC, of steroids 796
LC, of styrene copolymers 517
LC, of sugars 657
LC, of thiol drugs 680
LC, of thiols 717
LC, of toluene diisocyanate 507
LC, of transition-metal ions 747
LC, of triglycerides 209
LC, of trimethadione 325
LC, on anion-exchangers 435
LC, on bonded silicas 752
LC, on chemically-bonded phases 102
LC, on chiral diamine-silica 118
LC, on cross-linked polystyrene 341
LC, on non-porous polymer columns 583
LC, on polymer support 709
LC, on small bore columns 803
LC, on-column hydrolysis 328
LC, optimisation of 831
LC, optimum solvent composition for 15
LC, packing by solid-phase synthesis 254
LC, retention behaviour in 911
LC, retention prediction in 675
LC, salt interference in 557
LC, solute retention in 911
LC, stationary phases, preparation 254
LC, surface pH of packing 254
LC, to determine silanol groups 767
LC, voltammetric detection in 102, 106
LC, with electrochemical detection 651
LC, with isohydric solvents 889
LC-combined techniques 209
LC-FTIR interface with KBr disc 512
Ligand exchange 747
Ligand-exchange chromatography 118
Ligand-exchange, of amines 93
Linear solvent-strength theory 844
Linked packed and capillary columns in GC 487, 492, 499
Lipophilicity, TLC test for 184
Liquid chromatography - see LC

Mass spectra and GC data of drugs, book review 775
Menstrual cycle 835
Mercaptosilane, chemically bonded 423
Mercaptosilane, Cu(II) complexes 423
Methylation, flash 269
Methylphenylsiloxane oligomers, SFC of 928
Microbiological applications of LC, book review 775
Microcolumn LC-FTIR interface 512
Microporous glass, data for 326
Mobile phases, in TLC 409
Molecular polarisability 752
Molecular polarizabilities 338
Molecular weight distribution 663
Monobromobimane, fluorescence derivatives 717, 718
Morphine, extraction of 377

n-Propyl esters, for GC 760
n-Propyl esters, of dicarboxylic acids 265
Non-ionic detergents, SFC of 928
Non-linear additivity principal 595

Octadecyl-modified glasses 373
Octadecyl-modified polymers 320
Octadecylsilica, for trace enrichment 163
Oil residues, surface properties of 401
Olefins, specific reactions of 427
Oligodeoxynucleotides, by LC 247
On-line fractionation 818

p-Bromophenacyl esters 419
p-Phenylphenacyl esters 419
Packed pre-column in GC 487
PAH, by SFC 631
PAH, capacity factors of 475, 633, 635, 636
PAH, isolation of 899
PAH, LC of 473, 684, 752,803, 808, 825, 899
PAH, retention data for 756
PAH, retention times for 685
PAH, R_F values of 339
Paper chromatography, of amines 93
Paper chromatography, of lactulose 132

Paper electrophoresis, of lactulose 133
Partition coefficients, group contributions to 713
Partition coefficients, of metal ions 749
Partition coefficients, of ß-carbolines 713
Peak-cutting, in GC 566
PEG modified silicas 639
PEG, acid modified 553
PEG, grafting procedures 641
Pentaerithritol, alkylation of 574
Pentafluoroanilinopropyl silica 684
pH, influence on retention 439
Pharmacokinetic studies 269
Photoionisation detector, evaluation of 199
Physico-chemical measurements 443
Piperazine derivatives, for LC 508
Polycyclic aromatic hydrocarbons - see PAH
Polynuclear aromatic compounds 899
Polynuclear aromatic nitrogen heterocycles 899
Polynuclear aromatics, recovery tests 901, 902
Polystyrene, SFC of 663
Porath, Jerker 361
Porous polymer supports in GC 481
Porous polymers, and solute polarity 839
Porous polymers, performance of 839
Porous polymers, thermal aging of 841
Post-column derivatisation 657
Potential of zero charge 879
Pre-column concentration, in GC 502
Precolumn UV derivatisation 680
Preparative chromatography, book review 222
Pressure-gradient elution, in SFC 925
Propanolol, resolution of 895
Protein hydrolysis 116
2,6 Pyridine-bis-glyoxal-o-mercaptylanil complexes 86
4-(2-pyridylazo)resorcinol complexes 736

Retention and ion-exchange capacity 466
Retention and ionic strength of mobile phase 469
Retention and pH of mobile phase 468
Retention behaviour, in LC 925
Retention behaviour, in SFC 925
Retention indices of C6 alkanols on Carbowax 20 M 50
Retention indices of C6 alkanols on OV-101 50
Retention indices, calculation of 884
Retention indices, Kovats 884
Retention indices, n-alkanes 885, 886
Retention indices, of alkenylbenzenes 561
Retention indices, of epoxides 770
Retention indices, of paraffins and olefins 425, 429, 430
Retention indices, on macroporous polymers 286
Retention indices, prediction of 195
Retention mechanism, in ion-pair LC 667
Retention mechanism, lipophilic contribution 465
Retention of PAH in LC 473
Retention prediction, in GC 481
Retention prediction, in LC 675
Retention times, of fat soluble vitamins 321
Retention times, on porous polymers 842
Retention, effect of water on 859
R_F of amines 93
R_F values, of inorganic ions 649

s-Butylamine-containing mobile phases 653
Sample collector, annular 829, 830
Sample collector, efficiency of 831
SEC, correlation with nephelometric assay 88
SEC, history of 361
SEC, of haptoglobin 89
SEC, of phosphotungstic acid peptides 764
Selectivity optimisation 850
Sephadex LH-20 900
Sephadex, history of 361
Sequential simplex method 844
SFC and GPC, comparison 666
SFC, CO_2 mobile phase 21, 631
SFC, column density gradient 23
SFC, influence of various parameters 21
SFC, of aromatic hydrocarbons 925
SFC, of styrene oligomer fractions 38
SFC, on packed columns 21
SFC, photoionisation detector for 199
SFC, reduced plate height dependence in 21
SFC, reduced velocity in 21
SFC, retention prediction in 631
SFC, semi-preparative 38
SFC, solute capacity factor 22
SFC, temperature, pressure, eluent effects in 171
SFC, with binary eluents 171
SFC, with packed capillaries 663
SFC-IR, flow-cell approach 56
SFC-IR, solvent elimination approach 59
SFR-IR interfacing, a review 55
Silanization, kinetics of 442
Silanized silica, high ligand density 442
Silanol groups, reaction with methyllithium 767
Silica, ammonium phosphotungstate coated 814
Silica, bonded 767
Silica, chitosan-coated for LC 731, 732
Silica, esterification of 121
Silica, esterification of 279
Silica, large pore 905
Silica, mercaptosilane modified 423
Silica, polymer coated 465
Silica, salt modified 447
Silica, surface heterogeneity 722
Silica-bonded Cu(II) complexes 261
Silicas, modified by PEG 639
Silicas, surface properties of 639
Silicone, immobilisation of by ozone 169
Simplex optimisation 847
Size-exclusion chromatography - see SEC
Small bore columns, performance of 806
Small bore columns, preparation of 804
Solute retention, in stationary phase 911, 914
Solute-stationary phase interactions 756
Solvent composition, optimum for LC 15
Solvent interaction models 917
Solvent-solute interactions 752, 754
Solvents of abuse 626
Solvents, detection limits 627
Solvents, in biological samples 626
Solvophobic theory 571, 736
Stationary phase - solute interactions 473
Stationary phases, reaction conditions for 254
Steroids, extraction of 796
Steroids, LC of 796
Steroids, retention times 797
Stillingia oil, lipid analysis of 240
Structure-retention correlations, in GC 561, 590
Styrene oligomers, SFC of 928
Styrene-divinylbenzene, for enrichment 163
Sugars, LC of 657
Sugars, retention of 661
Supercritical fluid chromatography - see SFC
Surface coverage 639
Surface energy 641
Surface hydroxyls, distribution of 279

Taxonomic markers 850
Teflon capillary, knitted 709
Temperature programming, in SFC 663
Tetrahydrofuran in water 273
Thermal desorption sampling 856
Thermodynamic functions, by GC 97, 121
Thin-layer cell 874
Thin-layer chromatography - see TLC
Thiol drugs, LC of 680
Thiolyte derivatives for TLC 289
Thiophene-2-glyoxal-o-pyridineanil complexes 86
Tiselius, Arne 361

TLC locating reagent 477
TLC, as guide to flash chromatography 179
TLC, effect of acetic acid on 184
TLC, effect of halides on 207
TLC, electrostatic interactions in 337
TLC, of amino-acid enantiomers 141
TLC, of amino-acids 184, 207, 814
TLC, of carbazole alkaloids 205
TLC, of carboxylic acids 432
TLC, of cations 653
TLC, of chenodeoxycholic acid 601
TLC, of Cu and Fe 477
TLC, of fructose and glucose 140
TLC, of glycols in alcoholic beverages 137
TLC, of homocysteine and cysteine 289
TLC, of inorganic ions 648
TLC, of lactulose 133
TLC, of local anesthetics 407
TLC, of metal complexes 86
TLC, of peptides 184
TLC, of ß-carbolines 713
TLC, on alumina 205
TLC, on $BaSo_4$ 432
TLC, on brucine-treated silica 141
TLC, on halide-silica 207
TLC, on polyethyleneimine layers 648
TLC, on silica 653
TLC, on silica gel 86
TLC, two-dimensional 205, 407
Toluene diisocyanate, sampling method for 507
Trace analysis, GC 566
Trace enrichment, for LC 163
Trace organic analysis 370
Trace organics, in aqueous systems 273
Triglyceride analysis, review of 209

Urea derivatives, for LC 507

Water, trace analysis of 273
Wine, characterisation of 657

Xylenol orange indicator 355

Chromatographia Vol. 23, 1987 Key Word Index

Accurate system quantitation 492
Activity coefficients in the liquid phase 915
Addition reactions 3
Adsorbents 839
Adsorbents for gas chromatography 722
Adsorption isotherms 279
Adsorption studies 97
Air pollutants 803
Alcohols 97
Aldehydes 709, 803, 829
Aldicarb 109
Aldicarb sulfone 109
Aldicarb sulfoxide 109
Alkaline-earth cations 583
Alkenylbenzenes 561
Alkylated PAC 903
Alkylthiazoles 595
Allyl bonded phases 3
Amino acid analysis 115, 184
Amino acid derivatives 675
Amino acid enantioners 83, 722
Amino acids 118, 141, 207, 731, 764, 814
7-Aminodeacetoxycephalosporanic acid 350
Ammonium acetate buffer eluent 26
Ammonium tungstophosphate 814
Analysis of complex samples or dilute solution 492
Analysis of lactulose in carbohydrate mixtures 132
Anesthetic gas mixture 53
Anion-exchange chromatography 355
Anion-exchange stationary phases 435
Annular denuder 829
Antiepileptic drugs 373
Antioxidants, light stabilisers 7
Aqueous samples 273
Aromatic hydrocarbons 684
Arsenazo III 583
Arylsulphonohydrazides 328

Backflush HPLC 903
Backflush technique 579
Backflushing, peak-cutting technique 566
Bacterial cellular fatty acids 850
Barbital and pentobarbital 269
Barium sulphate/calcium sulphate 432
Behaviour of metal complexes 736
Binary eluents 171
Biphenols 102
BisGMA oligomers and isomers 412
Blood analysis 269
Bonded silicas 279, 767
Breakthrough volume 839
Brucine impregnated silica gel 141
Buffer memory technique 512
Butyrophenones 893

C_4-C_5 epoxides 770
C_6 alkanols 50
Calculation of optimum solvent composition 15
Calculation of temperature programmed 888
Calibration 934
Capacity ratio 171
Capacity ratios vs temperature 38
Capillary columns 553, 850
Capillary columns in series 790
Capillary gas chromatography 83
Capillary isotachophoresis 811
Carbazole alkaloids 205
Carbohydrate TMS-ethers 43
Carbon dioxide 21, 199, 631
Carbowax 20M 50
Carboxylic acids 432
Cation thin-layer chromatography 653
Cation-exchange LC 465
Cavity term 243
Cephalexin monohydrate, isomers 350
Characteristic volumes 243
Characterization of surfaces 341
Cheese peptides 764
Chemically bonded phases 261, 427, 442
Chenodeoxycholic acid 601
Chinese tallow, *Sapium sebiferum* 240
Chiral bonded phase 118
Chiral stationary phases 727
Chitosan-coated silica gel 731
Chloroderivatives of alkanes and alkenes 261
Chlorophylls and degradation products 26
Chrial separations 893
Chromatographic cross-fractionation 517
Chromatography 257
Citrus fruit 432
Coal derived liquids 179
Coal-derived products 579
Codeine and morphine in blood 377
Collector for air sampling 507
Column chromatography 915
Column efficiency utilization ratio 487
Column liquid chromatography 15, 26, 31, 93, 102, 109, 112, 118, 132, 163, 189, 209, 254, 292, 320, 325, 328, 331, 341, 355, 373, 377, 395, 412, 419, 435, 442, 473, 507, 557, 579, 583, 651, 657, 680, 684, 709, 713, 717, 727, 731, 736, 747, 752, 764, 767, 796, 803, 814, 825, 829, 835, 893, 899, 909
Column temperature gradients 209
Combined LC and other techniques 209
Complex biological samples 557
Complexation 423
Complexation gas chromatography 427
Complexation interaction 447
Concentration/thermal desorption 129
Confidence interval 934
Copper-impregnated zinc silicate 93
Corn silage 47
Correlation criterion 407
Correlation with nephelometry 89
Cotton materials 477

Cross-linked polystyrene 341
Cross-linking 435
Cu and Fe determination 477
Custard apple volatiles 129
CuZn-superoxide dismutase 599
Cyano-silica 427
3-Cyanopropyltrichlorosilane-treated plates 601
Cycloalkadienes 590
Cycloalkanes 590
Cycloalkenes 590
Cycloolefins 33

Dental restorative materials 412
Deoxynivalenol (DON) 47
Derivatization 574
Derivatization by ethacrynic acid 680
Desalting chromatography history 361
Dextran gel chromatography history 361
Diacetyldihydrofluorescein 112
Dicarboxylic acid analysis 265
Dicarboxylic acids 811
Diethylene glycol and sugars 137
Diethylenetriaminepentaacetic acid 747
Dihydroxyphenylpropanes 102
Dimethadione and trimethadione in serum 325
Direct injection 273
Direct-silica gel 893
Donor-acceptor complexes 684
Double-layer capacitance 878
Double-layer capacitance detection 883
Dual-column system 53

(E)-1-phenylpropene 395
Effect of silica 247
Effect of the carbon content 247
Effects of esterification on surface free energy 121
Efficiency 21
Electrochemical detection 651, 878
Electrosorption 878
Electrostatic interactions 337
Energy contributions of the alkyl groups 595
Environmental analysis 273, 829
Environmental samples 370
Enzymatic assays 557
Epimers 31
Essential oils analysis 790, 818
Esterification in aqueous solution 265, 760, 925
Esterification with methanol and hexadecanol 121
Estriol 835
Evaluation 903
Extraction methods 903

Fat soluble vitamins 320
Fatty acid esters 419
Flash chromatography 179
Flash methylation 269
Fluorescence derivatization 289, 717
Fluorescence detection 709
Fluoroesters 83
Fourier transform infrared spectrometry 512
Fourier transform IR detection 626
Fragrance volatiles of flowers 502
Free fatty acids analysis 553
Frontal analysis 163
FT-IR detection 547
Fungicides 328

Gas adsorption isotherms 215
Gas chromatography 3, 33, 43, 50, 53, 132, 169, 195, 215, 240, 261, 265, 269, 273, 286, 423, 481, 487, 492, 499, 547, 553, 566, 595, 626, 722, 767, 770, 790, 818, 839, 850, 856, 888, 925
Gas chromatography/mass spectrometry 129
Gas chromatography/mass spectrometry 502
Gas-solid chromatography 97, 279, 447, 561, 590
Gasoline 825
GC-MS analysis 574
Gel electrophoresis 599
Gel filtration history 361
Gel permeation chromatography 89, 764
Glass capillary columns 770
Gonadal steroids 31
Gradient elution optimization 844
Gradient HPLC of copolymers 517
Graft polymers 286
Graphite 97
Graphite fluoride 370
Graphitized thermal carbon black 561
Group contributions 713
Growth hormone releasing factor 571
γ- and δ-Haloesters 547

Halide ion impregnated silica gel 207
Haptoglobin 89
Headspace analysis 129
Headspace sampling 626
Hemoglobin 89
Heterogeneity of silica surface 722
High-performance liquid chromatography 7
High-Performance TLC 407, 601
Homocysteine and cysteine separation 289
HPLC column switching technique 47
Human erythrocytes 599
Hydrocarbons 97
Hydrochloric acid - thiocyanate media 648

Immobilized Carbowax-type stationary phases 553
Immobilized silicone stationary phases 169
Incomplete retention 517
Influence of surface pH 254
Influence of temperature, concentration and reaction time 254
Infrared spectroscopy 55
Injection techniques 331
Inorganic ions 648
Instrument bandbroadening by extrapolation 189
Integration routines 257
Interfacing 55
Interference by salts 557
Inverse gas chromatography 401, 639
Ion chromatography 878
Ion exchange chromatography 115
Ion pairing system 713
Ion-pair chromatography 883
Isocratic elution 7
Isoenzymes 599
Isohydric solvents 893
Isolation of pure material 909

Kinetic behaviour 21
Kinetics of silanization 442

Large injection-volumes 517
Ligand exchange 747
Ligand-exchange chromatography 118
Limit of calibration 934
Limit of determination 934
Linear isotherms 163
Liquid chromatography 215, 243, 247, 512
Local anesthetics 407
LogP prediction 713

Macroporous copolymers of 2-hydroxyethyl methacrylate 286
Maize 47
Marine phytoplankton 26
Menstrual Cycle 835
Mercaptosilane chemically bonded phase 423

Methanol or diethyl ether mobile phase 929
Methantheline bromide 667
Metoclopramide 651
Micro-computer 257
Microbore capillary columns 320
Microbore columns 331
Microcolumns 512
Molecular polarizability 752
Molecular weight distribution of polystyrene 663
Monobromobimane 717
MS and NMR identification 43

n-Propyl esters of aliphatic hydroxy acids 760
n-Propyl esters of aromatic polycarboxylic acids 925
n-Propyl esters of C_2-C_{16} dicarboxylic acids 265
Negative temperature programming 663
New packed precolumn 487
Nitrogen-specific detector 269
Non-porous gel 583
Normal and reverse phase 109
Nucleotides 731

Octadecyl bonded silica 163
Octadecyl-modified glasses 373
Oil distillation residues 401
Olefins π-complexes 423
Oligodeoxyribonucleotides 909
Oligosaccharides 557
On-column hydrolysis 328
On-line fractionation 818
Organic pollutants determination 856
Outer-sphere complexes 811
OV-101 50
Ozonization 169

Packed + capillary GC switching system 487, 492, 499
Packed capillary columns 663
Packed columns 21, 169
Packings of octadecylated microporous glass 325
PAH, nitro and oxy-PAH 803
Pancreatic stones 325
Paper chromatography 93
Particulate material in seawater 419
Pentaerythritol peralkylation 574
Pentafluoroanilinopropyl silica gel 684
Peptide analysis 184
Peptide isomer 571
Pharmaceutical formulations 680
Phase-solute interactions 752
Phenolic and flavonoid compounds 844
Photoionization detector (PID) 199
Photokinetic data 395
Physico-chemical properties 33
Polar sorbent for gas chromatography 286
Polarity 839
Polarity parameters 195
Polycyclic aromatic hydrocarbons 825
Polycyclic aromatics 473
Polycyclic aromatics 631
Polyethylene glycol modified silicas 639
Polyethyleneimine (PEI) cellulose 648
Polymer based octadecylsilica bonded phase 320
Polymer coating 435
Polymer coating 465
Polymer-based support 709
Polymethoxylated flavones 15
Polynuclear aromatic compounds 903
Polyolefins 7
Porous glass 373
Porous polymer beads 839
Porous polymers coated with liquid phases 481
Post-column derivatization 657
Pre-column concentration 502
Pre-column construction, oven and connector 499
Pre-column derivatization 112
Prediction of retention volume 481
Propantheline bromide 667
Propranolol 899
Protein chromatography history 361
Protein hydrolysis 115
Purification by extraction 790
2,6 Pyridine-bis-glyoxal-o-mercaptylanil complexes 86

Quantisation 407
Quantitative lipid analysis 240

Racemate resolution 118
Rat tissue 790
Reaction mechanism 395
Removal of ammonia 115
Residual silanol groups 767
Resolution of enantiomers 141
Retention behaviours 929
Retention in the stationary phase 915
Retention index 195
Retention index data 561, 590
Retention indices 33, 50, 595, 888
Retention mechanism 667
Retention prediction 631, 675
Reversed phase columns 7
Reversed phase operation 15
Reversed-flow GC 447
Reversed-phase capacity factors 243
Reversed-phase chromatography 184, 247
Reversed-phase HPLC 350, 571
Reversed-phase LC 844
Reversed-phase liquid chromatography 675
Reversed-phase separation 909
Reversed-phase systems 473, 752
Reversed-phase, ion-pair liquid chromatography 667
Review 292
Review of triglyceride analysis 209

s-butylamine eluents 653
Selective sampling 818
Semipreparative fractionation 38
Separation 350
Separation of amines 93
Separation of nickel and zinc 355
Separation of phenolic compounds 579
Separation of sugars 292
Sephadex^R history 361
Silica adsorbents 121
Silica gel 653
Silica-based stationary phase 465
Simplex method 844
Single-ring aromatic hydrocarbons 825
Single-stranded oligo-DNAs 247
Small-bore packed columns 803
Solid phase extraction 377
Solid phase preseparation 850
Solute, solvent molecular polarizabilities 337
Solution and adsorption thermodynamics 215
Solvents of abuse 626
Solvophobic theory 571, 736
Specific adsorption 883
Specific interactions 261
Stability 667
Stationary phase selectivity 850
Stationary phase-solute interactions 473
Stationary phases 839
Steroids 790
Stillingia oil 240
Strong adsorption sites 722
Structure-retention relationships 195
Styrene divinylbenzene 163
Styrene oligomers 38
Styrene/ethyl methacrylate copolymers 517
Sub- and supercritical conditions 171

Succinimido carbamate derivatives 899
Succinimido carbamate intermediates 722
Sugar analysis 657
Supercritical fluid chromatography 21, 38, 55 171, 199, 631, 663, 929
Surface OH distribution 279
Surface properties 401, 639
Sythesis of new bonded phases 3
Sythesis of stationary phase 254

Tautomeric equilibrium mixtures of aldoses 43
Thermal conductivity detector 53
Thermal desorption 856
Thermodynamic equilibria 215
Thin-layer chromatography 86, 132, 137, 141, 184, 205, 207, 289, 337, 432, 477, 648, 713, 814
Thiol drug analysis 680
Thiols and disulfides 717
Thiolyte derivatives 289
Thiophene-2-glyoxal-o-pyrdineanil complexes 86
Toluene Diisocyanate in air 507
Trace analysis 370, 566
Traces of ketones and haiogenated hydrocarbons 273
Transition metal complexes 423, 427
Transition metal ion separation 747
Two-dimensional identification 407
Two-dimensional TLC 205

Ultraviolet detector sensitivity 112
Urine 835
UV photometric detection 102

Variable polarity columns 790
Visualisation methods 137
Voltammetric detection 102

Wine 137
Wine characterization 657

Xylenol orange 355

Zn, Cd, Cu separation 653